

have augmented; when there are two, one of them is always smaller than the other. The rest of the protoplasm is hyaline or very finely granulated; then the entire protoplasm presents a mass of greasy granulations smaller than the primitive clots which have disappeared, and the conidium gives birth to a germinative filament, more rarely at the opposed poles. Often it appears that it gives birth to a secondary conidium, the budding produced by it swells, and is slightly constricted at the point where it emerged from the mother conidium, but before it detaches itself, the spherical budding gives birth to the germinative filament. I cannot follow its length beyond $\cdot 120$ mm. At this moment, it has only once presented to me a partition; the protoplasm which fills it is granular, but does not appear very rich, which may be perhaps attributed to the artificial medium in which the conidia germinated; its medium diameter is $\cdot 003$ mm.

[The excellent plates which accompany this work are almost necessary to understand the text; this also depends very much on the context for complete lucidity. The whole work will amply repay a careful perusal.]

SOME NEW JERSEY FUNGI.

By M. C. COOKE and J. B. ELLIS.

(Plate 68.)

2297. **Hypoxyton serpens.** *Fries.*—On *Acer rubrum*, Newfield, New Jersey, as also the following are all from the same locality.

2298. **Hysterium Mori.** *Schwz.*—On wood of *Morus*. Apparently the species of Schweinitz.

2299. **Hysterium Viticolum.** *C. & P.*—On *Rubus*. This appears to be the same species as that found in New York on *Vitis* (fig. 9).

2300. **Peziza virginella.** *C.* (No. 2152).—On leaves of *Vaccinium*.

2301. **Patellaria atrata.** *Fr.*—Fruit not mature. On oak limbs.

2302. **Sporidesmium Peziza.** *C. & E.*—On decorticated oak.

Cupulæformis, flavo-viridis, margine atris. Sporis ovatis, oblongis, vel pyriformibus, atro-brunneis. (Fig. 5—*a*, natural size; *b*, section; *c*, spores.)

Resembling a minute *Peziza*, scarce 1 m.m. broad, greenish-yellow and barren in the centre, with a black margin of ovate, oblong, or pear-shaped, multicellular spores, on short articulated pedicels.

In company with the above was the following singular and interesting fungus, which clearly belongs to the Discomycetes, and is referred, with some hesitation, to the genus *Hæmatomyces* :—

Hæmatomyces vinosus. *C. & E.*—On decorticated oak.

Sparsus, subglobosus, demum depressus, sinuato-gyrosus, subcerebrinus, immarginatus, atro-vinosus; ascis late clavatis; sporidiis biseriatis, elongato-ellipticis, multiseptatis, muriformibus, fuscis. (Fig. 10—*a*, individual magnified; *b*, section; *c*, asci and sporidia.)

Not more than a line broad; when dry resembling a rugose *Patellaria*, when moist sub-tremelloid, globoso-depressed, marked with gyrose furrows, dark-vinous. Asci broadly clavate; sporidia elongated-elliptic, biseriate, multiseptate, and muriform, brown ($\cdot 045\text{-}\cdot 05 \times \cdot 018$ m.m.)

2304. **Diplodia longispora.** *C. & E.*—In company with an immature *Sphæria* on decorticated oak (*Quercus coccinea*).

Sub-gregaria, semi-immersa, atra; sporis elongatis, uniseptatis, brunneis.

Perithecia rather small, and semi-immersed; spores unusually long and narrow ($\cdot 03\text{-}\cdot 035 \times \cdot 007$ m.m.)—fig. 7.

2305. **Sphæria botryosa.** *Fries.*—On oak wood.

2306. **Aspergillus maximus.** *Link.*—On dead twigs, running for several inches, and forming a dense brown woolly stratum.

2307. **Excipula hispidula** (*Peziza hispidula*, Schrad.)—On wood of *Morus*.

2308. **Sphæria (Immersæ) pachyascus.** *C. & E.*—On decorticated oak.

Immersa, sparsa; peritheciis minutis, subglobosis, nigris, ostiolo brevi; ascis late clavatis; sporidiis congestis, subfusiformibus, 5-7 septatis, constrictis, rectis vel curvulis, brunneis (fig. 1).

Immersed in the wood, with the punctiform ostiola alone visible; asci broadly clavate; sporidia fusiform, 5-7 septate, straight, or curved, brown ($\cdot 04\text{-}\cdot 045 \times \cdot 008$ m.m.)

2309. **Hendersonia sarmentorum**, var. **Rubi.** *West.*—On *Rubus*.

2311. **Diatrype Duriei.** *Mont.*—On maple twigs. Differing from Thumen's *Myc. Un.* No. 275, which is not the species of Montagne or Berkeley and Curtis (fig. 8).

2312. **Diatrype Duriei.** *Mont.*—On *Nyssa*.

2313. **Sphæria melanotes.** *B. & Br.*—On oak wood.

2314. **Eutypa lata.** *Tul.*—In bad condition. On oak.

2315. **Peziza (Patellea) macrospora.** *Fckl.*—On oak chips.

2316. **Lophiostoma microstoma.** *C. & E.*—On maple wood.

Immersa, sparsa. Peritheciis minimis, ostiolo brevi, compresso, minutis; ascis clavatis; sporidiis lanceolatis, 7-septatis, vix centro constrictis, brunneis.

Ostiola small, with a short compressed mouth; sporidia lanceolate, brown, scarcely constricted in the middle, paler towards each end, central cells broadest diminishing towards the poles ($\cdot 04\text{--}\cdot 05 \times \cdot 01$ m.m.), fig. 2.

2317. **Agyrium rufum.** Pers.—On decorticated maple.

2318. **Phoma consorta.** C. & E.—On decorticated maple.

Cæspitosa, atra. Peritheciis superficialibus globosis; sporis linearibus, truncatis, nucleatis (fig. 6).

Forming small tufts of 3-4 perithecia, which are small, black, smooth, and shining. Spores linear, truncate, with a nucleus at each end, and sometimes one in the centre ($\cdot 014$ m.m. long).

Figures are also given on the same plate of two species of *Lophiostoma*, found in the United States.

Fig. 3.—*Lophiostoma turrita*, C. & P.

Fig. 4.—*Lophiostoma magnata*, C. & P.

NEW BRITISH LICHENS.

By THE REV. J. M. CROMBIE, F.L.S.

Since my last notice in "Grevillea," Vol. iii., pp. 190-1, the following new species, recently detected in Britain, have been recorded by Nylander in the "Flora" for 1875:—

1. **Calicium elassosporum.** Nyl.—Subsimilar to *C. brunneolum* (more robust), but with smaller spores and gonidia. Thallus glaucescent or glaucous-green; gonidia conglomerated in deformed syngonidia; spores globose, $\cdot 0,0025$ m.m. in diameter.

On putrid trunks of decorticated alder. Glen Lockay, Perthshire (Crombie, August, 1875).

2. **Ramalina Curnowii.** Comb. in litt.—Thallus pale-glaucous, slender, fruticulose, rounded or somewhat compressed (but with some of the laciniae broader and planer), sparingly branched and intricate, subrigid; apothecia pale, convex, geniculato-adnate; spores ellipsoid, straight, $\cdot 0,011\text{--}15$ m.m. long, $\cdot 0,004\text{--}6$ m.m. thick.

Thallus K \times yellowish, blackish at the base; spermogones externally black, with spermatia $\cdot 0,003$ m.m. long, $\cdot 0,001$ m.m. thick. It is, perhaps, nearest to *R. cuspidata*, though from the spermogones it would belong to the section of *R. carpathica*.

On maritime rocks, near Penzance and the Lizard, Cornwall (W. Curnow).

3. **Flacodium dissidens.** Nyl.—Perhaps a subspecies of *Pl. murorum*, to which it is sufficiently similar, but the laciniae are more discrete and subfree. From *Pl. elegans* it differs in the vitelline colour of the thallus and the planer laciniae; spores $\cdot 0,009\text{--}16$ m.m. long, $\cdot 0,005\text{--}7$ m.m. thick.

On the slate roof of houses, near Cirencester, Gloucestershire (W. Joshua).